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REISSUE PATENT APPLICATION TRANSMITTAL

| | | |
|---|--|----------------------------|
| Address to: Mail Stop Reissue Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 | Attorney Docket No. | AMAT/2601 R 02/CMP/ECP/RKK |
| | First Named Inventor | Uziel Landau |
| | Original Patent Number | 6,261,433 |
| | Original Patent Issue Date (Month/Day/Year) | 07/17/2001 |
| | Express Mail Label No. | EV331233581US |

APPLICATION FOR REISSUE OF:

(Check applicable box)



Utility Patent



Design Patent



Plant Patent

APPLICATION ELEMENTS (37 CFR 1.173)

1. ☒ Fee Transmittal Form (PTO/SB/56)
(Submit an original, and a duplicate for fee processing)
2. ☐ Applicant claims small entity status. See 37 CFR 1.27.
3. ☒ Specification and Claims in double column copy of patent format
(amended, if appropriate)
4. ☒ Drawing(s) (proposed amendments, if appropriate)
5. ☐ Reissue Oath/Declaration (original or copy)
(37 C.F.R. 1.175) (PTO/SB/51 or 52)
6. ☐ Power of Attorney
7. ☒ Original U.S. Patent currently assigned? ☒ Yes ☐ No
(If Yes, check applicable box(es))
 - ☒ Written Consent of all Assignees (PTO/SB/53)
 - ☒ 37 C.F.R. 3.73(b) Statement (PTO/SB/96)
8. ☐ CD-ROM or CD-R in duplicate, Computer Program (Appendix)
or large table
9. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all of the following are necessary)
 - a. ☐ Computer Readable Form (CFR)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM (2 copies) or CD-R (2 copies); or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

10. ☒ Statement of status and support for all changes to the claims. See 37 CFR 1.173(c).
11. ☒ Original Patent Grant
 - ☒ Ribbioned Original Patent Grant
 - ☐ Statement of Loss (PTO/SB/55)
12. ☐ Foreign Priority Claim (35 U.S.C. 119)
(if applicable)
13. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS Citations
14. ☐ English Translation of Reissue Oath/Declaration
(if applicable)
15. ☒ Preliminary Amendment
16. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
17. Other: _____

18. CORRESPONDENCE ADDRESS

Customer Number.

OR ☒

Correspondence address below

| | | | | | |
|----------------|-------------------------------|------------------|----------------|-----------------|----------------|
| Name | Applied Materials, Inc. | | | | |
| Address | Patent Counsel PO Box 450A | | | | |
| City | Santa Clara | State | CA | Zip Code | 95052 |
| Country | USA | Telephone | (713) 623-4844 | Fax | (713) 623-4846 |

| | | | |
|--------------------------|--------------------------|--|---------|
| Name (Print/Type) | B. Todd Patterson | Registration No. (Attorney/Agent) | 37,906 |
| Signature | <i>B. Todd Patterson</i> | Date | 7/17/03 |

This collection of information is required by 37 CFR 1.173. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Reissue, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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| REISSUE APPLICATION FEE TRANSMITTAL FORM | | | | | | Docket Number (Optional) AMAT/2601 R 02/CMP/ECP/RKK | |
|---|---|---|-----------------------------|----------------------------|---------------------------|--|------------|
| Claims as Filed – Part 1 | | | | | | | |
| Claims in Patent | Number Filed in Reissue Application | (3) Number Extra | Small Entity | | Other than a Small Entity | | |
| | | | Rate | Fee | Rate | Fee | |
| (A) 29 | Total Claims (37 CFR 1.16(j)) | **** 9 = | x \$ _____ = | | or | x \$ <u>18.00</u> = | \$162.00 |
| (C) 21 | Independent claims (37 CFR 1.16(i)) | * 18 = | x \$ _____ = | | | x \$ <u>84.00</u> = | \$1,512.00 |
| | | | | Basic Fee (37 CFR 1.16(h)) | | \$ _____ | |
| | | | | Total Filing Fee | | \$ _____ | |
| Claims as Amended – Part 2 | | | | | | | |
| | (1) Claims Remaining After Amendment | (2) Highest Number Previously Paid For | (3) Extra Claims Present | Small Entity | | Other than a Small Entity | |
| | | | | Rate | Fee | Rate | Fee |
| Total Claims (37 CFR 1.16(j)) | *** 89 | MINUS | ** 29 | * = 60 | x \$ _____ = | x \$ <u>18.00</u> = | \$1,080.00 |
| Independent Claims (37 CFR 1.16(i)) | *** 30 | MINUS | ***** 21 | = 9 | x \$ _____ = | x \$ <u>84.00</u> = | \$756.00 |
| | | | | Total Additional Fee | | \$ _____ | |
| | | | | OR | | \$1,836.00 | |
| <p>* If the entry in (D) is less than the entry in (C), Write "0" in column 3.</p> <p>** If the "Highest Number of Total Claims Previously Paid For" is less than 20, Write "20" in this space.</p> <p>*** After any cancellation of claims.</p> <p>**** If "A" is greater than 20, use (B – A); if "A" is 20 or less, use (B – 20).</p> <p>***** "Highest Number of Independent Claims Previously Paid For" or Number of Independent Claims in Patent (C).</p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.</p> <p><input checked="" type="checkbox"/> Please charge Deposit Account No. <u>20-0782/2601 R 02/CMP/ECP/RKK</u> in the amount of <u>\$4,260.00</u>. A duplicate copy of this sheet is enclosed.</p> <p><input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fees under 37 CFR 1.16 or 1.17 which may be required, or credit any overpayment to Deposit Account No. <u>20-0782/2601 R 02/CMP/ECP/RKK</u>. A duplicate copy of this sheet is enclosed.</p> <p><input type="checkbox"/> A check in the amount of \$ _____ to cover the filing/additional fee is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p style="text-align: center; font-weight: bold; margin-top: 20px;">WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%;"> <p><u>7/17/03</u> Date</p> <p><u>37,906</u> Registration Number, if applicable</p> </div> <div style="width: 45%; text-align: right;"> <p><u>B. Todd Patterson</u> Signature of Applicant, Attorney or Agent of Record</p> <p><u>B. Todd Patterson</u> Typed or printed name</p> </div> </div> | | | | | | | |

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

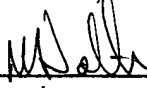
CERTIFICATE UNDER 37 CFR 1.10

I hereby certify that the following documents:

- 1) Reissue Patent Application Transmittal;
- 2) Reissue Application Fee Transmittal Form;
- 3) Copy of US Patent No. 6,261,433 in two column format;
- 4) Ribboned Original Patent Grant for US Patent No. 6,261,433;
- 5) Certificate of Correction for US Patent No. 6,261,433;
- 6) Consent of Assignee;
- 7) Statement Under 37 CFR 3.73(b);
- 8) 7 Sheets of Formal Drawings;
- 9) Preliminary Amendment;
- 10) Statement Under 37 CFR 1.173(c);
- 11) Information Disclosure Statement with US PTO Form 1449 and 33 references;
and
- 12) Unsigned Reissue Application Declaration by the Inventor

are being deposited on July 17, 2003 with the United States Postal Service in a package as "Express Mail Post Office to Addressee," mailing label No. **EV331233581US** addressed to: MAIL STOP REISSUE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

07/17/03
Date


Signature

U.S. PATENT DOCUMENTS

| | | | | | | | |
|-----------|---------|------------------|------------|-------------|---------|-------------------|------------|
| 3,770,598 | 11/1973 | Creutz | 204/52 R | 5,368,711 | 11/1994 | Poris | 204/193 |
| 4,027,686 | 6/1977 | Shortes et al. | 134/33 | 5,377,708 | 1/1995 | Bergman et al. | 134/105 |
| 4,092,176 | 5/1978 | Kozai et al. | 134/186 | 5,429,733 * | 7/1995 | Ishida | 204/224 R |
| 4,110,176 | 8/1978 | Creutz, et al. | 204/52 R | 5,447,615 * | 9/1995 | Ishida | 204/224 R |
| 4,113,492 | 9/1978 | Sato et al. | 96/67 | 5,516,412 | 5/1996 | Andricacos et al. | 204/224 R |
| 4,315,059 | 2/1982 | Raistrick et al. | 429/112 | 5,608,943 | 3/1997 | Konishi et al. | 15/302 |
| 4,326,940 | 4/1982 | Eckles et al. | 204/232 | 5,625,170 | 4/1997 | Poris | 177/50 |
| 4,336,114 | 6/1982 | Mayer et al. | 204/52 R | 5,651,865 | 7/1997 | Sellers | 204/192.13 |
| 4,376,685 | 3/1983 | Watson | 204/52 R | 5,705,223 | 1/1998 | Bunkofske | 427/240 |
| 4,405,416 | 9/1983 | Raistrick et al. | 204/68 | 5,718,813 | 2/1998 | Drummond et al. | 204/192.12 |
| 4,428,815 | 1/1984 | Powell et al. | 204/297 W | 5,723,028 | 3/1998 | Poris | 204/231 |
| 4,435,266 | 3/1984 | Johnston | 204/276 | | | | |
| 4,489,740 | 12/1984 | Rattan et al. | 134/140 | | | | |
| 4,510,176 | 4/1985 | Cuthbert et al. | 427/82 | | | | |
| 4,518,678 | 5/1985 | Allen | 430/311 | | | | |
| 4,519,846 | 5/1985 | Aigo | 134/15 | | | | |
| 4,693,805 | 9/1987 | Quazi | 204/192.22 | | | | |
| 4,732,785 | 3/1988 | Brewer | 427/240 | | | | |
| 4,789,445 | 12/1988 | Goffman et al. | 204/114 | | | | |
| 5,039,381 | 8/1991 | Mullarkey | 204/47.5 | | | | |
| 5,055,425 | 10/1991 | Leibovitz et al. | 437/195 | | | | |
| 5,092,975 | 3/1992 | Yamamura et al. | 204/198 | | | | |
| 5,155,336 | 10/1992 | Gronet et al. | 219/411 | | | | |
| 5,162,260 | 11/1992 | Leibovitz et al. | 437/195 | | | | |
| 5,222,310 | 6/1993 | Thompson et al. | 34/202 | | | | |
| 5,224,504 | 7/1993 | Thompson et al. | 134/155 | | | | |
| 5,230,743 | 7/1993 | Thompson et al. | 134/32 | | | | |
| 5,252,807 | 10/1993 | Chizinsky | 219/390 | | | | |
| 5,256,274 | 10/1993 | Poris | 205/123 | | | | |
| 5,259,407 | 11/1993 | Tuchida et al. | 134/151 | | | | |
| 5,290,361 | 3/1994 | Hayashida et al. | 134/2 | | | | |
| 5,316,974 | 5/1994 | Crank | 437/190 | | | | |
| 5,328,589 | 7/1994 | Martin | 205/296 | | | | |
| 5,349,978 | 9/1994 | Sago et al. | 134/153 | | | | |

OTHER PUBLICATIONS

PCT International Search Report dated Feb. 7, 2000.

Kenneth E. Pitney, "NEY Contact Manual," Electrical Contacts for Low Energy Uses, 1973, no month available.

Lucio Colombo, "Wafer Back Surface Film Removal," Central R&D, SGS-Thompson, Microelectronics, Agrate, Italy, 6 pages, no month/year available.

Semitool©, Inc., "Metallization & Interconnect," 1998, 4 pages, no month available.

Verteq Online©, "Products Overview," 1996-1998, 5 pages, no month available.

Laurell Technologies Corporation, "Two control configurations available-see *WS 400 OR WS-400Lite*," Oct. 19, 1998, 6 pages.

Peter Singer, "Tantalum, Copper and Damascene: The Future of Interconnects," Semiconductor International, Jun. 1998, Pages cover, 91-92, 94, 96 & 98.

Peter Singer, "Wafer Processing," Semiconductor International, Jun., 1998, p. 70.

* cited by examiner

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,261,433 B1
DATED : July 17, 2001
INVENTOR(S) : Landau

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 5,

Line 38, please replace "electric" with -- dielectric --.

Column 9,

Line 24, please replace "comers" with -- corners --.

Column 15,

Line 64, please replace "predetermined" with -- pre-determined --.

Column 17,

Line 40, please replace "e.g." with -- e.g., --.

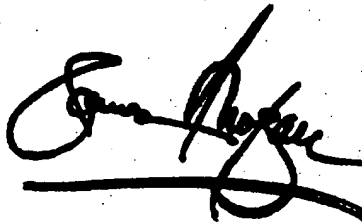
Column 18,

Line 26, please delete "Li".

Signed and Sealed this

Twenty-eighth Day of May, 2002

Attest:

A handwritten signature in black ink, appearing to read "James E. Rogan", written over a horizontal line.

Attesting Officer

JAMES E. ROGAN
Director of the United States Patent and Trademark Office